

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

Claims 1-25 (canceled)

Claim 26 (new): A mobile information processor, comprising:  
communication parts for performing data communication with an external apparatus;

a storage part for storing mobile directory information including information of nearby apparatuses; and

a controller for collecting information of accessible nearby apparatuses and updating the mobile directory information stored in the storage part based on the collected information.

Claim 27 (new): A mobile information processor according to Claim 26, wherein the controller receives the information of the nearby apparatuses from a space directory which stores the information of the nearby apparatuses, and updates the mobile directory information stored in the storage part.

Claim 28 (new): A mobile information processor according to Claim 26, wherein the controller receives the information of the nearby apparatuses from a space directory which stores the information of the nearby apparatuses, while, in response to a transmission challenge from the space directory, the controller transmits encrypted data of the challenge created by its own secret key together with a public-key certificate to the space directory.

Claim 29 (new): A mobile information processor according to Claim 26, wherein the communication parts perform Bluetooth wireless communication.

Claim 30 (new): A mobile information processor according to Claim 26, wherein the controller periodically collects the information of the accessible nearby apparatuses.

Claim 31 (new): A mobile information processor according to Claim 26, wherein the controller communicates with a personal directory which stores original data of the mobile directory information through a communication relay included in the nearby apparatuses, and registers a position of the mobile information processor in the personal directory.

Claim 32 (new): An information processor, comprising:  
communication parts for performing data communication with an external apparatus;

storage means for storing original information of mobile directory information; and

a controller for receiving a service request from the external apparatus through the communication parts and providing at least part of the original information as mobile directory information to the external apparatus.

Claim 33 (new): An information processor according to Claim 32, wherein the controller registers position information of the external apparatus.

Claim 34 (new): An information processor, comprising:  
communication parts for performing data communication with an external apparatus;

a storage part for storing information of information processors in a local area; and

a controller for receiving a service request from the external apparatus through the communication parts and providing a service to the external apparatus based on the information of the information processors.

Claim 35 (new): An information processor according to Claim 34, wherein the controller transmits the information of the information processors about nearby apparatuses stored in the storage part to the external apparatus.

Claim 36 (new): An information processor according to Claim 34, wherein, before transmitting the information of the information processors about nearby apparatuses stored in the storage part to the external apparatus, the controller performs authentication processing by challenge response, wherein the controller performs challenge transmission and receives encrypted data of the challenge transmission created by a secret key of the external apparatus and a public-key certificate as a response from the external apparatus.

Claim 37 (new): An information processor according to Claim 34, wherein the communication parts perform Bluetooth wireless communication.

Claim 38 (new): A data communication system, comprising:  
a mobile apparatus storing mobile directory information; and  
a personal directory which stores original information of the mobile directory information and receives a service request from the mobile apparatus through a network and provides a service to the mobile apparatus according to the service request.

Claim 39 (new): A data communication system according to Claim 38, further comprising a service provider, wherein the service provider provides a service based on information obtained from the personal directory.

Claim 40 (new): A data communication system according to Claim 38, further comprising a space directory server which stores information of information processors in a local area, wherein the space directory server receives a service request including information of nearby apparatuses included in the mobile directory information from the mobile apparatus and provides a service through the nearby apparatus.

Claim 41 (new): A data communication system according to Claim 40, wherein the service providing process is performed through a service provider.

Claim 42 (new): A method of obtaining information of nearby apparatuses by using a mobile information processor, the method comprising:

- accessing a space directory which stores the information of the nearby apparatuses;

- transmitting, in response to a transmission challenge from the space directory, encrypted data of the challenge created by its own secret key together with a public-key certificate to the space directory;

- receiving the information of the nearby apparatuses from the space directory; and

- storing the received information in a storage part as mobile directory information.

Claim 43 (new): A method according to Claim 42, further comprising communicating with a personal directory, which stores original data of the mobile directory information, so as to register position information of the mobile information processor in the personal directory.

Claim 44 (new): A data communication method, comprising:

- obtaining information of nearby apparatuses as information of information processors in a local area and storing the obtained information in a storage part as mobile directory information, the step of obtaining being performed by a mobile apparatus; and

- transmitting a service request including the information of the nearby apparatuses included in the mobile directory information from the mobile apparatus to a personal directory, which stores original data of the mobile directory information, so that the personal directory provides a service through the nearby apparatus.

Claim 45 (new): A data communication method according to Claim 44, wherein the information of the nearby apparatuses is obtained from a space

directory server which stores the information of information processors as nearby apparatuses.

Claim 46 (new): A data communication method according to Claim 44, wherein the service request is transmitted through a service provider.

Claim 47 (new): A data communication method, comprising:

obtaining information of nearby apparatuses as information of information processors in a local area directly from the information processor and storing the obtained information in a storage part as mobile directory information, the step of obtaining being performed by a mobile apparatus; and

receiving a service request including the information of the nearby apparatuses included in the mobile directory information from the mobile apparatus, the step of receiving being performed by a personal directory which stores original data of the mobile directory information so that the personal directory provides a service through the nearby apparatus.

Claim 48 (new): A data communication method according to Claim 47, wherein the service request is received through a service provider.

Claim 49 (new): A computer program for allowing a mobile information processor to execute a process of obtaining information of nearby apparatuses, the process being performed in a computer system, the program comprising:

a step of accessing a space directory which stores the information of the nearby apparatuses;

a step of transmitting, in response to a transmission challenge from the space directory, encrypted data of the challenge created by its own secret key together with a public-key certificate to the space directory;

a step of receiving the information of the nearby apparatuses from the space directory; and

a step of storing the received information in a storage part as mobile directory information.

Claim 50 (new): A computer program for allowing a mobile information processor to execute a process of obtaining information of nearby apparatuses, the process being performed in a computer system, the program comprising:

- a step of accessing an information processor which stores apparatus information;

- a step of transmitting, in response to a transmission challenge from the information processor, encrypted data of the challenge created by its own secret key together with a public-key certificate to the information processor;

- a step of receiving the apparatus information from the information processor; and

- a step of storing the received information in a storage part as mobile directory information.